

WHAT IS CLAIMED IS:

1. A network system comprising:

a hub site;

at least one remote site; and

a satellite for transmitting data to and from the hub site and the remote site;

wherein call control and management messages between the hub site and the remote site use internet protocol (IP) addressing for identification.

2. The network system of Claim 1 further comprising a plurality of remote sites.

3. The network system of Claim 2 further comprising:

a first communication channel to transmit data to the plurality of remote sites; and

a plurality of second communication channels to transmit data from the plurality of remote sites to the hub.

4. The network of Claim 1 wherein the hub site comprises:  
a primary network control modem for receiving and transmitting data and the call and control management messages to and from the hub site and for maintaining a network database; and at least one hub receive modem for receiving data from a remote site.

5. The network of Claim 4 wherein the hub site further comprises a secondary network control modem to take over functions of the primary network control modem should the primary network control modem fail.

6. The network of Claim 1 wherein the at least one remote site comprises a remote modem for continuously receiving data from the hub site and for transmitting data when required.

7. A network system comprising:

a hub site;

a plurality of remote sites; and

a satellite for transmitting data to and from the hub site and the remote site;

wherein available bandwidth of the network is divided into separate channels for transmitting and receiving data; and

wherein call control and management messages between the hub site and the remote site use internet protocol (IP) addressing for identification.

8. A network system in accordance with Claim 7 wherein each channel in the network is configured to transmit data only to a defined remote site.

9. A network system in accordance with Claim 8 wherein the plurality of channels comprises:

a first communication channel to transmit data to the plurality of remote sites; and

a plurality of second communication channels to transmit data from the plurality of remote sites to the hub.

10. The network of Claim 9 wherein the hub site comprises:

a primary network control modem for receiving and transmitting data and the call and control management messages to and from the hub site and for maintaining a network database; and

at least one hub receive modem for receiving data from a remote site.

11. The network of Claim 10 wherein the hub site further comprises a secondary network control modem to take over functions of the primary network control modem should the primary network control modem fail.

12. The network of Claim 9 wherein each of the plurality of remote sites comprises a remote modem for continuously receiving data from the hub site and for transmitting data when required.

13. The network of Claim 10 wherein the primary network control modem maintains a database for storing configuration data and for distributing network data to the plurality of remote sites.

14. The network of Claim 10 wherein the data base stored in the primary network control modem maintains a listing of all the plurality of channels in the network; a listing of destination IP addresses and destination HDLC addresses for each of the plurality of channels; a listing of a minimum available bandwidth of each of the plurality of channels and a listing of a guaranteed maximum bandwidth of each of the plurality of channels.

15. The network of Claim 14 wherein the data base stored in the primary network control modem maintains a listing of encryption capability of each channel.